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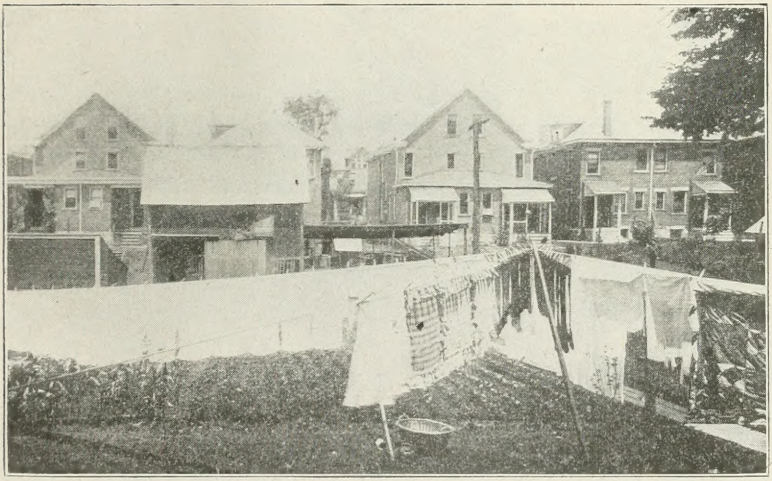
HOME LAUNDERING

By Treva E. Kauffman



WASH DAY

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HOME LAUNDERING

By Treva E. Kauffman

If we should enter the average American home on a Monday morning, the weekly washing would probably be in progress. Although it has been the custom for many years to wash on Monday, there may be some good reason to postpone the process until another day. The day before washing the clothes should carefully be gone over, sorted, and the stains removed. This preliminary work cannot always be accomplished on Saturday and may not always be justified on Sunday, hence, the desirability of selecting another day rather than Monday.

It may not be many years until the laundry work is moved from the home to a public laundry, as the other household arts have gone out of the home. But until that day comes, every way and means should be used to make this labor as light as possible. In some sections of the country, cooperative laundries are being started in connection with creameries. The same boiler and engine that runs the creamery will run the washers and do the washing. Such a laundry could very easily take care of the laundry work for a number of families.

The purpose of this bulletin is to help the housewife to become better acquainted with every detail of laundry work so that it may be more of a pleasure than drudgery.

Clothing absorbs perspiration, secretions, and bits of dead skin. After a time, the limit of absorption is reached and the pores of the cloth become clogged. Clothing in this condition can not absorb and prevents proper evaporation of moisture from the body. The objects in laundering clothing are first, to remove dirt and to reopen the pores of the cloth; second, to dry the cloth so as to renew its power of absorption; third, to destroy bacteria that may have found their way into the clothing. Therefore, one can readily see that weekly washing is necessary to insure clean clothes.

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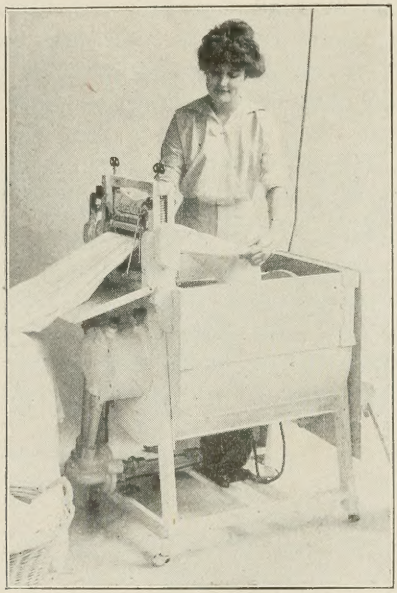
EQUIPMENT FOR LAUNDERING

Much of the drudgery of laundry work is due to improper equipment. If the washboard is still used and water is carried from outside into the house to be heated, then carried out to be emptied, labor is unnecessarily increased. A separate room for laundry purposes is always best. Stationary tubs and many labor-saving devices may be installed, but when this is not possible, at least a drain for the kitchen sink and a washing machine can be provided.

Washing Machines. — The large number of washing machines used over the country indicates that women know the value of washing machines in the saving of fabric, time, and strength. The housekeeper needs to select a machine that will force water through the clothing without injuring it and one that works easily. A good hand machine may be purchased for from $6 to $10. Running a hand washing machine is a good deal easier than rubbing on a washboard, moreover, boy or man power may often be used.

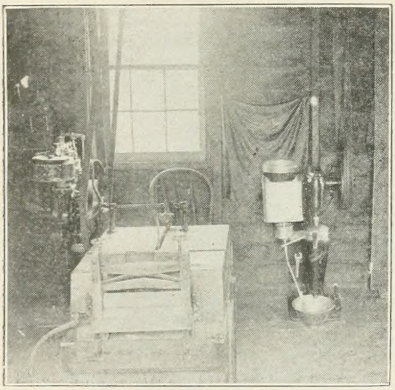


Electric washer and wringer.

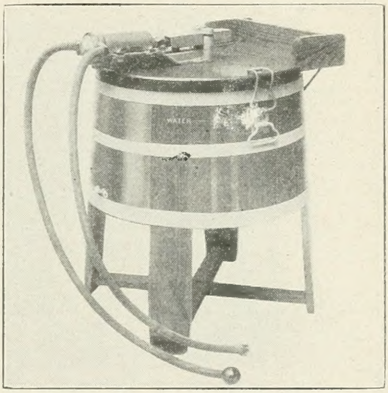
Many machines are run by power other than hand power. In such cases the labor item is reduced to a minimum. If water under pressure is available, a water motor can be used for running the machine. Such a machine complete with motor may be secured for about $15 or $18. On many farms the gasoline engine that is used for running the corn grinder, the pump, or the cream separator can very easily be attached to the washing machine and wringer. Also, a number of washing machines are operated by electric motors. These machines are very convenient, but at present they are quite expensive, costing probably, $50 or more.

Tubs. — Even tho a washing machine is used, one or more tubs are necessary. Stationary tubs made of enameled iron are perhaps best. If stationary tubs are not available, fibre or galvanized-iron tubs should be used. Wooden tubs are heavy and unsanitary. The top of laundry tubs, whether set or loose, should be about 36 inches from the floor. This does away with unnecessary back bending.

Washboards and Wringers. — The washboard, altho filling a place in the laundry, wears the clothes as well as the worker and should be used as little as possible. Probably the best kind to use is a glass washboard set in wood. Wooden washboards are unsanitary and metal ones may develop tiny cracks that tear the fabric and collect filth.



Gasoline engine runs washer and cream separator.



Water power and water motor makes washing easy.

A wringer saves not only time and strength but the clothes as well. A good wringer will last for many years. When it is not in use, the screws should be loose and it should be covered with a cloth. Occasionally, the rubber should be cleaned with a little kerosene, care being taken to wipe the oil off the rollers.

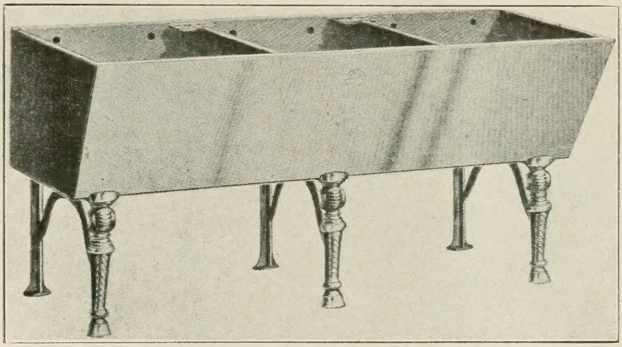
Irons and Mangles. — A number of irons are now on the market that may be used in summer, when it is not desired to heat up the kitchen range. Of such irons, the electric is the most satisfactory and common, but gas, gasoline, and denatured-alcohol irons are used. In all of these so-called self-heated irons, the polishing surface remains clean, heat is supplied constantly, and no time is lost in changing irons. A very good self-heating iron may be purchased for about $4.00.

Irons of all kinds must be kept clean if best results are to be secured. They may be obtained in various weights and in different shapes for special purposes.

Mangles may be used in the home for flat work. Damp clothes are folded and pressed between the rollers. These mangles are heated by gas, gasoline, or electricity, and are great labor savers where the weekly wash contains many flat pieces, such as sheets, table linen, etc.

Ironing Board. — An ironing board should be well padded and covered with a clean cloth. It may have its broader end attached to the wall by hinges, so that, when not in use, it may be folded up against the wall. The cloth may be tied on instead of tacked and then can be changed easily.

Miscellaneous Washing Utensils. — All washing utensils which come in contact with the clothing should be non-rustable. Only the best grade of tinware should ever be used. The miscellaneous utensils commonly used in washing are: a wash boiler, which should be copper because copper is one of the best conductors of heat and does not rust; one enamel or fibre pail and a galvanized-iron pail; a wooden spoon; a dipper; a clothes basket; two saucepans, one for starch and one for soap solution; beeswax or paraffine wrapped in cloth to keep the irons smooth; clothes pins; iron holder and stand; and clothes horse or rack.



Set tubs are desirable in rural homes. These are made of stone.

FABRICS

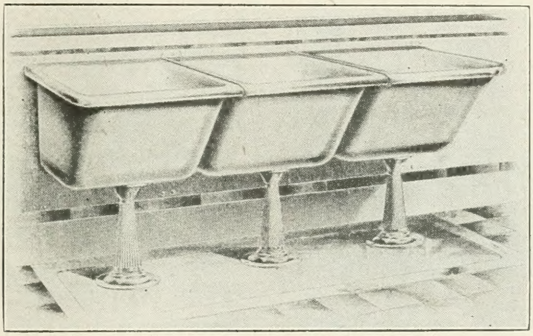
The fibers used for clothing are of animal and vegetable origin. The animal fibers are wool and silk and the vegetable fibers are cotton and linen.

Wool, which forms the covering of sheep, is among the most important fibers used for clothing. Each fiber of wool is composed of sections of sheaths or scales. This formation of wool fibers makes the sides of each fiber rough and jagged. The exposed edges of the scales all point in the same direction and if we work a wool fiber between the thumb and finger it will move in one direction only. It is the jagged edges of wool fibers that allow them to be matted together to form felt. It is likewise the working together of the wool fibers that causes woolen goods to shrink.

Silk, which is the product of silkworms, is a smooth, lustrous, strong, elastic fiber. If silk fibers are rubbed together they simply slide over each other.

Cotton is the soft fiber that grows on the seed of cotton plants. Each fiber, as seen under a microscope, is a flattened twisted tube that is thicker at the edges than it is in the middle.

Linen is the fiber of the flax plant and, as viewed thru a microscope, each fiber appears as a long transparent tube with slight notches or joints along its walls.



Enameled steel tubs are easy to clean.

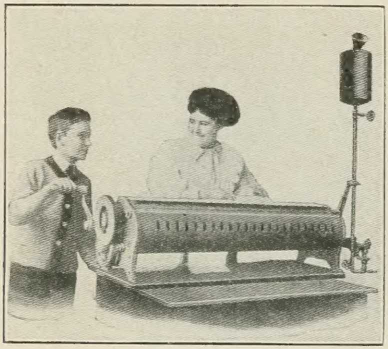
EFFECTS OF ALKALIS AND ACIDS ON FABRICS

Altho the laundry may be well equipped, if the housewife does not understand how different kind of fabrics respond to different cleaning agents, best results may not be secured.

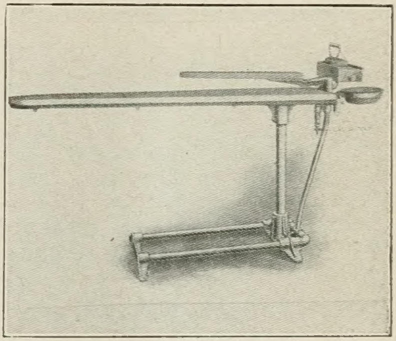
Some of the common cleaning agents are alkalis, some are acids, and in others the principal material is an acid or an alkali. The chief household alkalis are lye, washing soda, borax, and ammonia. Acids are sour tasting and occur in considerable quantity in vinegar and in the juice of lemons and in smaller quantities in the juices of other fruits. Acids and alkalis affect different materials differently and if the two are brot together in the right proportion they neutralize each other; that is, one destroys the characteristic action of the other and they thus become harmless.

In general, alkalis attack animal fibers and acids, plant fibers. However, cold, dilute, or weak acid, such as fruit juices, have little effect on cotton or linen unless the acid is allowed to dry on the goods which are later moistened and ironed. Wool resists the action of acids very well, but, in time, ordinary acids will roughen the wool fibers and strong mineral acids, such as hydrochloric, will decompose them. Dilute acids roughen and weaken silk fiber and concentrated acids disintegrate it.

All alkalis act on wool and, if sufficiently strong, will dissolve it. However, dilute solutions of borax or of mild soap have only a slight injurious effect. The first effect of an alkali on silk is to deaden or dull the luster, and then the fiber is dissolved. Dilute solutions of lye, borax, or of soap have little effect on cotton or linen, but if lye is allowed to remain on the goods for a considerable length of time it is harmful.



A mangel makes the ironing of table and bed linen easy.



A substantial ironing board for the laundry.

CLEANING AGENTS

Water. — The most important and best cleaning agent for the laundry is soft, clean, clear, water which will dissolve much of the dirt in clothing. People of primitive times depended on the flow of water to clean their clothes, and, even to-day the people of some nations wash in streams with the aid of a flat stone upon which to rub the clothing.

Hard water is not best for laundering, because hard water contains lime compounds which decompose the soap used and make an insoluble curd on the water. Water containing bi-carbonate of lime derived from limestone is known as temporarily hard, because it can be softened by boiling. But water containing sulphate of lime, or gypsum, or land plaster, in solution is said to be permanently hard and boiling has no effect on it.

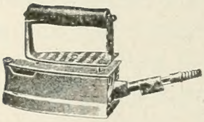
A number of materials are on the market for softening water. Alkalis, such as washing soda and lye, are the best.

Water may be softened by adding to each gallon of water 2 tablespoons of a solution made by dissolving 1 pound of washing soda in 1 quart of boiling water. This solution should be kept bottled and ready for use at any time. Borax should be used to soften water in which wool is to be washed. Use 1 tablespoonful of borax dissolved in 1 cup of water for each gallon of wash water.

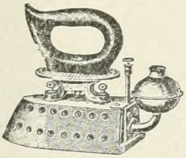
Iron may occur in water and will cause a yellow tinge in clothing. To get rid of iron, add washing soda to water, then let stand for 5 or 6 days, when the top should be drawn off and used.

Organic matter, such as decomposing vegetable or animal matter, may be removed by adding 1 tablespoon of a mixture of 2 parts borax and 1 part alum for each gallon of water.

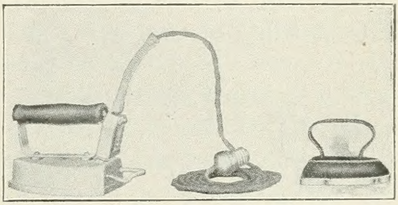
Soap. — In very early ages soap was unknown. But in our grandmother's day, soap making was one of the household arts. Now the making of soap has been largely taken from the home to the factory.



Gas iron.



Alcohol iron.



Electric iron. Old fashion sad iron.

Soap is made from most common vegetable and animal fats and oils, as tallow, suet, lard, cotton seed oil, and cocoanut oil, chemically combined with lye, caustic soda or caustic potash. Soap has the ability to soften dirt and to dissolve it. Hot soap solution will do the best work.

Three grades of soap, mild, medium, and strong, are desirable in a laundry. A mild soap is made by adding just enough alkali to change all fat present into soap. This soap should be used for washing flannels, wools, silks, and fabrics with delicate colors. Either a medium or a strong soap is produced if an excess of alkali is used. The degree of strength depends on the quantity of free alkali left in the soap. A medium soap should be used for durable colored goods, and strong soap for white goods, both linen and cotton.

Soap Solution. — A very desirable soap solution is made by shaving one bar of laundry soap in 3 or 4 quarts of cold water. Then heat the water gradually for about 1 hour, or until the soap is dissolved.

Soap Substitutes. — A number of materials may be used as soap substitutes. Soap bark, made from the leaves, stems, and bark of some plants, acts quickly and removes dirt. Ox gall is sometimes used to wash woolens and fabrics of delicate color, or other material that is easily injured by strong alkalis. Solutions of bran, rice, potatoes, and starch are recommended as good soap substitutes in washing delicate fabrics and colors.

A bran solution is made by boiling 1 cup of bran in 1 quart of water for ½ hour, strain. Boil the bran in a second quart of water for another ½ hour. Strain and mix the two. Cool and reduce with warm water when needed.

To make potato water, grate two large potatoes into 1 pint of clean, clear, soft water. Strain into 1 gallon of water and let the liquid settle. Pour this off and use.

Starch solutions may be made from flour, cornstarch, fine laundry starch, grated potato, rice flour, or water in which rice has been boiled. The solution should be as thick as thin cream and this should be diluted with four times its volume of warm water; that is, 1 quart of starch should be added to 4 quarts of water. These proportions are for the first water in which garments are washed. The second water should contain 8 quarts of water and 1 quart of starch. In using a starch solution for cleansing, care should be exercised to see that the starch is strained so that there are no lumps, and that the garments are ironed thoroly.

REMOVAL OF STAINS

Stains should be removed before clothing is washed, because the action of soap and water may set them. In removing a stain, we find some substance in which the stain is soluble. If acid is used, stretch the stained part over a bowl of boiling water and with a medicine dropper or old tooth brush apply dilute acid, occasionally dipping the stain into the boiling water to which a little ammonia has been added. Ammonia overcomes the bad effects which the acid might have on the cloth. If boiling water is used, pour thru stain, pouring from some height so as to strike the stain with force. If alkali is required, dilute ammonia is preferred, the method of procedure being the same as in case of acid.

Blood. — Wash with cold water until stain turns brown, then rub with naptha soap and soak in warm water.

Chocolate. — (1) Wash with soap and tepid water. (2) Sprinkle with borax and soak in cold water.

Coffee and Indigo. — (1) Spread the stained article over a bowl and pour boiling water thru it until the stain disappears. Have the water fall from a little above so that it strikes the cloth with some force. (2) Soak for a short time in Javelle water or in a weak solution of oxalic acid. Rinse thoroly with boiling water containing a little dilute ammonia water. Repeat if necessary.

Cocoa. — Wash in cold water first, then rinse and pour boiling water thru it. If resistant, try a bleaching agent.

Grass Stains. — (1) Soak in alcohol. (2) Wash in naphtha soap and warm water. (3) For colored fabrics apply molasses or a paste of soap and cooking soda. Let stand over night and wash in tepid water.

Grease Spots. — (1) Wash with soap and water. Turpentine, oil, or lard are often used to soften old spots before washing. (2) Grease is soluble in benzine, alcohol, chloroform, ether, and benzol. In order to keep diluted grease from spreading, spread stain over a piece of blotting paper and rub toward center with a piece of clean cheese cloth. For delicate fabrics chloroform and ether are the best solvents. (3) Apply paste made of Fuller's earth or powdered French chalk with turpentine or water. Allow to stand several days and then brush off.

Ink. — (1) Ink stain is often difficult to remove as ink varies so greatly in composition. Neither cold water nor milk will set a stain, so these are always safe to use to remove a greater part of the ink. If the ink is spilled on an article that can be put in a basin of water, do this at once then rinse until no more ink will come out. If the ink is spilled on the floor or carpet, cover the spot with some absorbent, remove, continue to do this until no more ink is absorbed. Then apply cut end of lemon, trimming off end as it becomes soiled. Rinse with cold water. (2) Wet stain with cold water, and then apply 10-per-cent solution of oxalic acid. Let stand a few minutes and rinse in water to which a little ammonia has been added. Repeat until stain disappears. (3) Wet stained part with a paste made of lemon juice, salt, starch, and soap, and then expose to the sunlight. (4) Alcohol will remove some ink stains.

Iron Rust. — (1) Wet the stained part with borax and water or ammonia and spread over a bowl of boiling water. Apply 10-per-cent solution of hydrochloric acid drop by drop until stain begins to brighten. Dip at once into water. If stain does not disappear, repeat the process. After stain is removed, rinse at once very thoroly, using either borax or ammonia in rinse water. (2) Proceed as above using a 10 per cent solution of oxalic acid instead of hydrochloric acid. Oxalic acid is not so detrimental to fabrics as hydrochloric acid but is poisonous. (3) Try method 3 under ink.

All these methods destroy color and unless care is taken will greatly weaken the fabric.

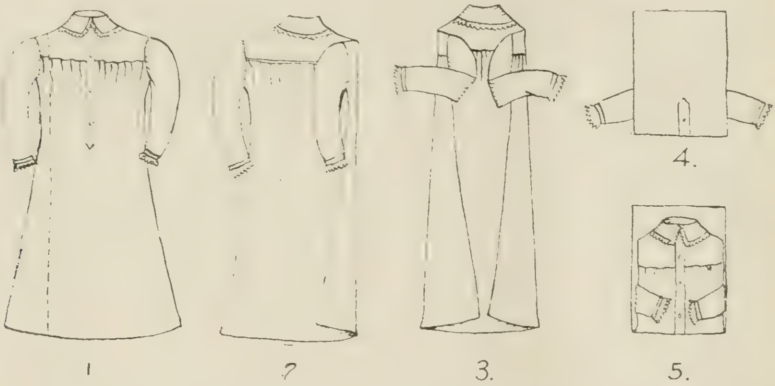
Iodine. — Soak in alcohol, chloroform, or ether.

Lamp Black or Tar. — Saturate spot with kerosene. Wash with naphtha soap and water. If lamp black is on a carpet rub spot with starch, cornmeal, flour, Fuller's earth, or salt.

Machine Oil. — (1) Wash with cold water and soap, rubbing from the outside toward the center of the spot, using care not to allow the spot to spread. (2) Wet spot with turpentine, benzine, or alcohol and let it stand a few minutes. Wet again and sponge with a clean cloth. Continue until stain disappears.

Medicine. — Soak in alcohol.

Milk or Cream. — Wash in cold water, then with soap and water.



Method of folding night gowns.

Mildew. — (1) Light and recent stains may often be removed by wetting them, rubbing with soap, then covering spot with wet starch and spread in sun. Renew application frequently. (2) Put on lemon juice and expose to direct sunlight. (3) Chloride of lime and Javelle water are both effective agents in removing mildew stains from white fabrics. Soak until stain disappears and rinse well.

Mucus. — Soak in ammonia water or in salt and water, then wash with cold water and soap.

Paint and Varnish. — (1) Same as method 2 for machine oil. (2) Soak fabrics with delicate colors in chloroform. (3) If paint is old it may take some time to soften, but equal parts of ammonia and turpentine will soften old paint stains, after which they may be removed by method 1 or 2.

Perspiration. — (1) Wash in soap suds and place in sunshine.

(2) Soak in Javelle water a few minutes, then wash. Repeat until stain disappears. (3) Use oxalic acid as for iron rust.

Tea. — (1) Spread the stained article over a bowl and pour boiling water thru it from a height so as to strike with force until stain disappears. (2) Sprinkle with borax and soak in cold water. (3) Soak spot in glycerine, then wash.

Wine and Fruit Strains. — (1) Use method 1 under tea. (2) Alcohol softens and dissolves many fruit stains. (3) Soak stain in equal parts of Javelle water and boiling water. Rinse well in boiling water to which a little ammonia has been added.

Wagon Grease. — Soften in cold water, then wash with soap and water.

Vaseline. — Wash a fresh stain with turpentine. Boiling sets the stain.

Stove Polish. — (1) If fresh, a stove polish stain is easily removed by washing in naphtha soap and cold water. (2) If the stain is an old one use method for lamp black and tar.

Scorch. — (1) Wet the scorched area and expose to action of sun. Repeat several times. (2) Wet and rub with soap. Cover the spot with thin mixture of starch and water, and spread in sun. (3) Extract juice of two onions, add 1 cup of vinegar, 2 ounces of Fuller's earth, and ½ ounce of soap. Boil, spread over scorched surface. Let it dry in sun. Wash out thoroly.

BLEACHING AGENTS

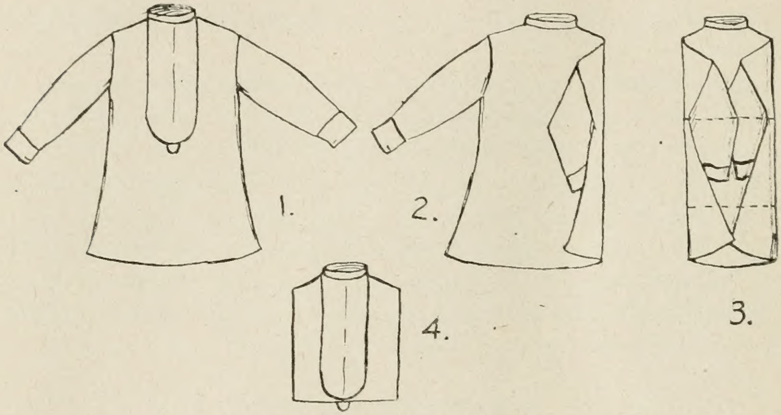
The best bleaching agents are sunshine, fresh air, and green grass, but it is sometimes found necessary to use a chemical. If garments have become yellow with age or if Nature's purifiers cannot always be had, Javelle water is, probably, the best bleach to use. Javelle water is made as follows: Place 1 pound of washing soda and 1 quart of boiling water in an agate kettle and stir until the soda is dissolved, then allow the solution to cool. Dissolve ½ pound of chloride of lime in 2 quarts of cold water. Let it settle and pour the clear liquid into the quart of cool soda solution. This mixture loses strength on exposure to light and air and, therefore, should be bottled and placed in a dark place. It also removes color and must be used on white fabrics. Use this mixed with equal parts or more of water and do not let the garments stay in over ½ hour. Rinse well in several waters and lastly in water in which a little ammonia has been added.

Clothes may be bleached by placing them in direct sunlight, but sunlight is effective only while the clothes are moist. After a piece of cloth dries in the sun it should be made damp again and hung out.

It may be necessary to repeat the wetting operation several times before the yellow tinge of the cloth becomes white. Frozen cloths and cloth spread out on the grass are said to bleach readily. Doubtless the readiness with which such cloths bleach is due to the fact that they remain moist.

WASHING OPERATIONS

As has been suggested, the clothes should first be looked over, sorted, mended, and stains removed. Clothes should be sorted and the following kinds placed together. (1) White cotton or linen clothing; (2) table linen; (3) body linen, bed linen, towels, and handkerchiefs; (4) soiled towels and cloths; (5) colored clothing and stockings; and (6) flannels.



Method of folding men's shirts.

Washing. — The work of washing may be divided into the following operations, (1) soaking, (2) rubbing, (3) boiling, and (4) rinsing.

1. Soaking the clothes loosens the dirt and makes washing much easier. Ordinarily only white clothes should be soaked, but some colored clothes having fast colors may be soaked if very soiled.

All clothing should not be put to soak in the same tub. Use one tub for table linen, one for bed and body linen, and a third one for soiled towels and cloths. Wet all soiled parts of clothing with soap solution and fold that part in. Pack garments in tub, cover with warm water and soak over night. In the morning rinse the clothes to get rid of dirt which was loosened by the soaking.

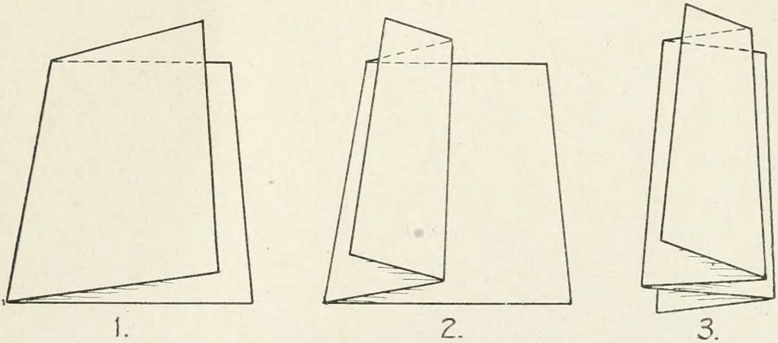
2. Pour warm water into tub or washing machine and add enough soap solution to make a good suds, then put in clothes. Rubbing by hand or motion of washing machine is necessary to get dirt out of clothing.

3. It is claimed that if naphtha soap is used, boiling is not necessary, but it is recommended that the clothes be boiled at least once a month to purify even if naphtha soap is used each week.

4. Clothes should be well rinsed, because soap or strong alkalis left in clothes may injure the fiber. Rinsing water should be soft and hot. After rinsing, wring clothes and shake out garment.

Wool should be washed in lukewarm water. A soap solution of mild soap should be used. Wash up and down in water and avoid rubbing, for this will mat the fibres. Rinse free of soap in several waters of same temperature. Hang in warm place to dry and pull in shape. If woolens or flannels are to be pressed, cover with cheese cloth slightly dampened and iron with moderately hot iron.

Silk should be washed in much the same way as wool. Use warm water, with mild soap solution. Do not rub silk for it breaks the fibres and destroys their durability. Rinse in several warm waters until water is clear. Place between dry towels and put thru wringer closely adjusted. Silk should be ironed on wrong side with only a moderately hot iron. If iron is too hot, the silk will be stiff.



Method of folding table linen.

Bluing. — Clothes become yellow from careless washing, dark colored soaps, stains, and impure water. Bluing is used to cover up or to whiten the yellowish color. The quantity of bluing to use must be determined by the housewife. It is best to make a strong solution in a pan of water, then add a little of this to the water in which the clothes are to be placed. The bluing water should be a pale blue color. Do not allow the clothes to stand in bluing water, as it will streak them.

Starching. — Starch is obtained from many plants. The usual sources of starch used for laundry purposes are corn, wheat, and rice.

Rice starch is little used in this country but it is manufactured and used in Europe extensively. It gives a finer, smoother finish than any other starch. Cornstarch is used largely by housewives, because it is cheap and is nearly always available. Its stiffening quality is high, but it has a tendency to lump and show starch spots after ironing. Wheat starch is used largely in commercial launderies, when flexibility and finish are wanted. Wheat starch should be used in home laundry. A mixture of wheat and corn starch would give stiffness, flexibility, and good finish.

To prepare starch, mix ½ cup of starch with ½ cup of cold water and then gradually add to the mixture 1 quart of boiling water, stirring constantly. If cornstarch is used, cook slowly for 20 minutes, if wheat starch is used, cook slowly for 30 minutes. If a mixture of the two is used, add the wheat starch first and cook 15 minutes, then add the cornstarch and cook 15 minutes longer. Stir frequently while cooking.

Borax, alum, paraffin, wax, turpentine, kerosene, gum arabic, glue, and dextrin may be added to starch and cooled with it to prevent it from sticking to the iron, to increase the body of the cloth, and to improve its color.

Drying. — Drying of clothes should be done out of doors in order to purify and bleach them. In commercial launderies, chemicals are used to whiten clothes because they are so quickly dried in steam closets and not exposed to the sun. Clothes should be hung on line with threads of material straight. Avoid hanging by corners.

Dampening. — It is best to dampen clothes and leave them over night but only as many articles should be dampened as can be ironed the next day. Some people find a clean whisk broom useful for sprinkling clothes. Clothes should be dampened but not drenched, altho linen can be made very damp.

Ironing. — Ironing is done to give a finish to clothes and to keep them clean longer. It is necessary to have clean irons, a firm ironing board padded and covered with a clean white cloth, and some beeswax or paraffin to keep the irons clean. Always iron first, that part of a garment which will muss least on further handling, for example sleeves first in night dress. Laces and embroideries are ironed first because they dry out quickly. Folding is necessary to store things and keep them from mussing. In general, all pieces should be folded several times lengthwise, then softly crosswise, until of convenient shape for handling.

"Cleanliness is next to godliness."